



Gulf Harmony XVI

Extra High Viscosity Index Hydraulic oil for Extreme Climatic Conditions

Product Description

Gulf Harmony XVI series are anti-wear hydraulic oils with extra high viscosity index of 200 specially developed for forestry machinery and equipment operating in extreme climatic conditions like Arctic climate area. These are formulated with synthetic base oils, highly shear stable polymer and an advanced additive system to meet the stringent requirements of modern hydraulic systems using high pressure high output pumps. They exceed the performance requirements of global industry standards viz. DIN 51524 Part 3 HVLP, SS 155434, AFNOR NFE 48-603 (HV) & ISO 11158 HV and majority of the international OEMs.

Features & Benefits

- Extremely high viscosity index assures equipment protection at cold start-up temperatures and protects system components at high operating temperatures
- Outstanding thermo-oxidative stability reduces deposit formation, improves pump & valve performance and allows extension of oil and filter change intervals
- Exceptional anti-wear property results in longer pump life and reduced maintenance costs
- Excellent shear stability minimises viscosity loss over time under high shear conditions
- Excellent demulsibility helps in faster separation of water from oil and resists formation of emulsions
- Special rust & corrosion inhibitors protect multi-metallurgy components against corrosion
- Very good filterability properties under wet and dry conditions
- Compatible with multi-metals and sealing materials commonly used in hydraulic systems

Applications

- Hydraulic and power transmission systems of forestry machinery and equipment operating in extreme climatic conditions like Arctic climate area.
- Critical hydraulic systems such as high accuracy numerically controlled machine tools and those employing close clearance servo valves
- Other hydraulic systems for improved performance

Specifications, Approvals & Typical Properties

ISO Viscosity grades		32	46
Meets the following Specifications			
DIN 51524 Part 3 HVLP, AFNOR NFE 48-603 (HV), ISO 11158 HV, SS 155434, Denison HF-0, HF-1, HF-2		x	x
Eaton(Vickers) M-2950-S, I-286-S, Eaton M-2952-S, Bosch Rexroth 07 075 for vane, piston & gear pumps,		x	x
Cincinnati Machine, Sauer Danfoss 520L0463		P-68	P-70
Typical Properties			
Test Parameters	ASTM	Test Values	
Viscosity, cSt / after soaking for 72 hrs, cSt	D 445	3601/ 3687 @ -30°C	1793/1882 @ -20°C
Viscosity @ 40 °C, cSt	D 445	33	44.7
Viscosity Index	D 2270	200	202
Flash Point, °C	D 92	208	202
Pour Point, °C	D 97	-48	-48
Density @ 15°C, Kg/l	D 1298	0.869	0.872
Rust Test	D 665A/B	Pass	Pass
Copper Corrosion (3 hrs @ 100°C)	D 130	1a	1a
Emulsion Test 30 minutes max @ 54 °C	D 1401	Pass	Pass
Foam after 10 minutes for all sequences	D 892	Nil	Nil
FZG, fail load stage	DIN 51354 Part II	11	11

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Properties mentioned above are typical only and minor variations, which do not affect the product performances, are to be expected in normal manufacturing. The above information is based on past history of the grade only and must not be construed as a guarantee of performance. Follow equipment manufacturer's recommendations for performance level and viscosity grade. The Material Safety Data Sheet for this product is available from your nearest Gulf Distributor.

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